FEMS Microbiology Letters

AUTHOR INDEX VOLUME 56

Adler, L., see Trollmo, C. (56) 321
Allardet-Servent, A., see Segondy, M. (56) 177
Amann, R., Ludwig, W., Laubinger, W., Dimroth, P. and Schleifer, K.H.
Cloning and sequencing of the gene encoding the beta subunit of the sodium ion translocating ATP synthase of *Propionigenium modestum* (56) 253
André, L., see Trollmo, C. (56) 321
Anraku, Y., see Yamato, I. (56) 21
Aparicio, J.F., see De los Reyes-Gavilán, C.G. (56) 301
Arbuthnott, J.P., see Huang, J. (56) 109
Avraham, Y., Yashphe, J. and Grossowicz, N.
Thymidine phosphorylase and uridine phosphorylase of *Lactobacillus casei* (56) 29

Barbés, C., see De los Reyes-Gavilán, C.G. (56) 301
Barbotin, J.N., see Sayadi, S. (56) 307
Barnum, S.R., see Smoker, J.A. (56) 119
Bénichou, J.-C., see Fréhel, C. (56) 225
Beppu, T., see Tagami, H. (56) 161
Berg, W.D., see Peterson, J.W. (56) 139
Berry, F., see Sayadi, S. (56) 307
Bhatnagar, N., see Falah, A.M.S. (56) 89
Bhatnagar, R., see Falah, A.M.S. (56) 89
Blomberg, A., see Trollmo, C. (56) 321
Borriello, S.P., see Kamiya, S. (56) 331
Bosch, A., see Tartera, C. (56) 313
Bothe, H., see Häger, K.-P. (56) 189
Bouvet, O.M.M. and Grimont, P.A.D.
Evolutionary divergence of enterobacterial genes coding for the glucose phosphotransferase system components (56) 145
Boylan, M., see Twohig, J. (56) 327
Brehm, J.K., see Oultram, J.D. (56) 83

C., G., see Hien, N.T. (56) 337
Caravano, R., see Segondy, M. (56) 177
Cazzulo, J.J., Nowicki, C., Santome, J.A., Wernstedt, C. and Hellman, U.
Amino acid composition and N-terminal sequence of the NADP-linked glutamate dehydrogenase from *Trypanosoma cruzi* (56) 215
Cervantes, C. and Ohtake, H.
Plasmid-determined resistance to chromate in *Pseudomonas aeruginosa* (56) 173
Cevenini, R., Donati, M. and La Placa, M.
Effects of penicillin on the synthesis of membrane proteins of *Chlamydia trachomatis* LGV2 serotype (56) 41
Chakraborty, R.N., see Patel, H.N. (56) 131
Chernyak, B.V., see Dmitriev, O.Y. (56) 79
Chew, L.C.K., Tacon, W.C.A. and Cole, J.A.
Effect of growth conditions on the rate of loss of the plasmid pAT153 from continuous cultures of *Escherichia coli* HB101 (56) 101
Christiansen, L., see Diderichsen, B. (56) 53
Cianciotto, N.P., Long, R., Eisenstein, B.I. and Engleberg, N.C.
Site-specific mutagenesis in *Legionella pneumophila* by allelic exchange using counterselectable ColE1 vectors (56) 203
Clark, D.P., see Reams, S.G. (56) 231
Cole, J.A., see Chew, L.C.K. (56) 101
Coso, O.A., see Rubinstein, C.P. (56) 67
Courvalin, P., see Sougakoff, W. (56) 343
Cowan, D., see Lambert, E. (56) 157
Crabbe, M.J.C.
The effect of thiols and the Ca^{2+} ionophore A23817 on growth and antibiotic production in *Cephalosporium acremonium* (56) 71

Daniel, R.M., see Patel, B.K.C. (56) 285
De los Reyes-Gavilán, C.G., Aparicio, J.F., Barbés, C., Hardisson, C. and Sánchez, J.
Adsorption capability determines phage plaque size on *Streptomyces antibioticus* producing endodeoxyribonuclease (56) 301
Dembek, G. and Lingens, F.
Isolation and characterization of a meta-cleavage product in the degradation of quinaldic acid by *Azotobacter sp.* (56) 261
Desai, S.B., see Patel, H.N. (56) 131
Diderichsen, B. and Christiansen, L.
Cloning of a maltogenic alpha-amylase from *Bacillus stearothermophilus* (56) 53
Dimroth, P., see Amann, R. (56) 253
Dion, M., see Zealey, G. (56) 123
Dmitriev, O.Y. and Chernyak, B.V.
The properties and structure of the membrane ATPase from *Vibrio alginolyticus* (56) 79
Donachie, W. and Gilmour, N.J.L.
Sheep antibody response to cell wall antigens expressed in vivo by *Pasteurella haemolytica* serotype A2 (56) 271
Donati, M., see Cevenini, R. (56) 41
Droffner, M.L., see Yamamoto, N. (56) 209

Earhart, C.F., see Elkins, M.F. (56) 35

Egan, A.F., see Shay, B.J. (56) 183
Eisenstein, B.I., see Cianciotto, N.P. (56) 203
Elkins, M.F. and Earhart, C.F.
An *Escherichia coli* enterobactin cluster gene with sequence homology to *trpE* and *pabB* (56) 35
Engleberg, N.C., see Cianciotto, N.P. (56) 203
Ericsson, L.D., see Stack, R.J. (56) 1

Fairbrother, J.M., Lallier, R., Leblanc, L., Jacques, M. and Larivière, S.
Production and purification of *Escherichia coli* fimbrial antigen F165 (56) 247
Falah, A.M.S., Bhatnagar, R., Bhatnagar, N., Singh, Y., Sidhu, G.S., Murthy, P.S. and Venkitasubramanian, T.A.
On the presence of calmodulin-like protein in mycobacteria (56) 89
Flores, E. and Muro-Pastor, M.I.
Uptake of glutamine and glutamate by the dinitrogen-fixing cyanobacterium *Anabaena* sp. PCC7120 (56) 127
Fréhel, C., Rastogi, N., Bénichou, J.-C. and Ryter, A.
Do test tube-grown pathogenic mycobacteria possess a protective capsule? (56) 225
Fukaya, M., see Tagami, H. (56) 161

Galeazzi, L., Grilli, G., Turchetti, G., Groppa, G. and Giunta, S.
High reactivity of the chlorpromazine/hydrogen peroxide test with cytochrome oxidase-positive bacteria (56) 317
Gil, I., see Gómez, E. (56) 47
Gilmour, N.J.L., see Donachie, W. (56) 271
Giunta, S., see Galeazzi, L. (56) 317
Goldhar, J., see Grünberg, J. (56) 241
Gómez, E., Melgar, M.M., Pérez Silva, G., Portolés, A. and Gil, I.
Exocellular products from *Bifidobacterium adolescentis* as immunomodifiers in the lymphoproliferative responses of mouse splenocytes (56) 47
Goussard, S., see Sougakoff, W. (56) 343
Grant, W.D., see Hamamoto, T. (56) 221
Grilli, G., see Galeazzi, L. (56) 317
Grimont, P.A.D., see Bouvet, O.M.M. (56) 145
Groman, N.B., see Serwold-Davis, T.M. (56) 7
Groppa, G., see Galeazzi, L. (56) 317
Grossowicz, N., see Avraham, Y. (56) 29
Gruber, K., Tanahashi, H., Tsuboi, A., Tsukagoshi, N. and Udaka, S.
Comparative study on the cell wall structure of protein-producing *Bacillus brevis* (56) 113
Grünberg, J., Perry, R., Hoschützky, H., Jann, B., Jann, K. and Goldhar, J.
Nonfimbrial blood group N-specific adhesin (NFA-3) from *Escherichia coli* O20:KX104:H$^-$, causing systemic infection (56) 241

Hacker, J., see Muñoa, F. (56) 167
Hadley, W.M., see McDowell, T.D. (56) 151
Häger, K.-P., Hundeshagen, B. and Bothe, H.
The demonstration of reversed respiration in intact cells of chemolithoautotrophically grown *Bradyrhizobium japonicum* (56) 189
Hamamoto, T., Takashina, T., Grant, W.D. and Horikoshi, K.
Asymmetric cell division of a triangular halophilic archaebacterium (56) 221
Hardisson, C., see De los Reyes-Gavilán, C.G. (56) 301
Hellman, U., see Cazzulo, J.J. (56) 215
Hien, N.T., Kerby, N.W., C., G., Machray, , Rowell, P. and Stewart, W.D.P.
Expression of glutamine synthetase in mutant strains of the cyanobacterium *Anabaena variabilis* which liberate ammonia (56) 337
Hiraishi, A.
Bicarbonate-stimulated dark fermentative growth of a phototrophic purple nonsulfur bacterium (56) 199
Honda, T., see Kongmuang, U. (56) 105
Horikoshi, K., see Hamamoto, T. (56) 221
Horinouchi, S., see Tagami, H. (56) 161
Hoschützky, H., see Grünberg, J. (56) 241
Huang, J., Smyth, C.J., Kennedy, N.P., Arbuthnott, J.P. and Napoleon Keeling, P.W.
Haemagglutinating activity of *Campylobacter pylori* (56) 109
Hudson, J.A., see Patel, B.K.C. (56) 285
Hundeshagen, B., see Häger, K.-P. (56) 189

Izumi, Y., Kanzaki, H., Morita, S., Kato, N. and Yamada, H.
Dichlorophenolindophenol-linked formate dehydrogenase of the methanol-utilizing *Mycobacterium gastri* MB19 (56) 277

Jacques, M., see Fairbrother, J.M. (56) 247
Jann, B., see Grünberg, J. (56) 241
Jann, K., see Grünberg, J. (56) 241
Javor, G.T. and Kim, H.
A simple method for screening porphyrin secretion by colonies of *Escherichia coli* (56) 195
Jerez, C.A.
The heat shock response in meso- and thermoacidophilic chemolithotrophic bacteria (56) 289
Jofre, J., see Tartera, C. (56) 313
Juárez, A., see Muñoa, F. (56) 167

Kamiya, S., Reed, P.J. and Borriello, S.P.
Analysis of purity of *Clostridium difficile* toxin A derived by affinity chromatography on immobilized bovine thyroglobulin (56) 331
Kanzaki, H., see Izumi, Y. (56) 277
Kato, N., see Izumi, Y. (56) 277
Kawamura, Y., see Tagami, H. (56) 161
Kempf, B. and Träger, L.
Production of monoclonal antibodies against 3α,20β-hydroxysteroid dehydrogenase from *Streptomyces hydrogenans* (56) 237
Kennedy, N.P., see Huang, J. (56) 109
Kerby, N.W., see Hien, N.T. (56) 337

Kim, H., see Javor, G.T. (56) 195
Klein, M., see Zealey, G. (56) 123
Kok, J., see Suvorov, A. (56) 95
Kongmuang, U., Honda, T. and Miwatani, T.
Effect of nicking on Shiga-like toxin I of enterohaemorrhagic *Escherichia coli* (56) 105
Kurland, C.G., see Mikkola, R. (56) 265

Lac, B., see Willison, J.C. (56) 61
Lallier, R., see Fairbrother, J.M. (56) 247
Lambert, E., Cowan, D. and Piper, P.W.
Detection of sequences homologous to the highly-conserved HSP70 gene of eukaryotes in thermophilic eubacteria and archaebacteria (56) 157
La Placa, M., see Cevenini, R. (56) 41
Larivière, S., see Fairbrother, J.M. (56) 247
Laubinger, W., see Amann, R. (56) 253
Leblanc, L., see Fairbrother, J.M. (56) 247
Lingens, F., see Dembek, G. (56) 261
Long, R., see Cianciotto, N.P. (56) 203
Loosmore, S., see Zealey, G. (56) 123
Loughlin, M., see Oultram, J.D. (56) 83
Ludwig, W., see Amann, R. (56) 253

Machray, , see Hien, N.T. (56) 337
Mahadevan, A., see Vasudevan, N. (56) 349
Massad, G., Simpson, L.M. and Oliver, J.D.
Isolation and characterization of hemolysin mutants of *Vibrio vulnificus* (56) 295
McDowell, T.D., Reed, K.E. and Hadley, W.M.
Accumulation of ppGpp in three streptococci during periods of amino acid starvation (56) 151
McKay, A.M.
A plate assay method for the detection of fungal polygalacturonase secretion (56) 354
Melgar, M.M., see Gómez, E. (56) 47
Mikkola, R. and Kurland, C.G.
Media dependence of translational mutant phenotype (56) 265
Minton, N.P., see Oultram, J.D. (56) 83
Miwatani, T., see Kongmuang, U. (56) 105
Moratinos, L.C., see Rubinstein, C.P. (56) 67
Morgan, H.W., see Patel, B.K.C. (56) 285
Morita, S., see Izumi, Y. (56) 277
Muñoa, F., Hacker, J. and Juárez, A.
Characterization of a chromosomal mutant that blocks hemolysin excretion in *Escherichia coli* (56) 167
Murakami, H., see Yamato, I. (56) 21
Muro-Pastor, M.I., see Flores, E. (56) 127
Murthy, P.S., see Falah, A.M.S. (56) 89

Nakamura, H., see Yamato, I. (56) 21
Napoleon Keeling, P.W., see Huang, J. (56) 109
Nasri, M., see Sayadi, S. (56) 307
Nowicki, C., see Cazzulo, J.J. (56) 215

Ochoa, L.G., see Peterson, J.W. (56) 139
Ohtake, H., see Cervantes, C. (56) 173
Okumura, H., see Tagami, H. (56) 161
Oliver, J.D., see Massad, G. (56) 295
Oultram, J.D., Loughlin, M., Swinfield, T.-J., Brehm, J.K., Thompson, D.E. and Minton, N.P.
Introduction of plasmids into whole cells of *Clostridium acetobutylicum* by electroporation (56) 83

Patel, B.K.C., Hudson, J.A., Morgan, H.W. and Daniel, R.M.
Non-diauxic fermentation of acid hydrolysed pine by a strain of *Clostridium thermohydrosulfuricum* isolated from a New Zealand hot spring (56) 285
Patel, H.N., Chakraborty, R.N. and Desai, S.B.
Isolation and partial characterization of phenolate siderophore from *Rhizobium leguminosarum* IARI 102 (56) 131
Pérez Silva, G., see Gómez, E. (56) 47
Perry, R., see Grünberg, J. (56) 241
Peterson, J.B.
The interaction of metronidazole with electron carriers of the *Azotobacter vinelandii* respiratory particle fraction (56) 135
Peterson, J.W., Ochoa, L.G. and Berg, W.D.
Inhibitory effect of ibuprofen on the cholera toxin-induced cyclic AMP response in Chinese hamster ovary cells (56) 139
Piper, P.W., see Lambert, E. (56) 157
Portolés, A., see Gómez, E. (56) 47

Ramuz, M., see Segondy, M. (56) 177
Rastogi, N., see Fréhel, C. (56) 225
Reams, S.G. and Clark, D.P.
Glucose repression of anaerobic genes of *Escherichia coli* is independent of cyclic AMP (56) 231
Reed, K.E., see McDowell, T.D. (56) 151
Reed, P.J., see Kamiya, S. (56) 331
Rogers, H.J., see Wright, G. (56) 15
Rogers, P.J., see Shay, B.J. (56) 183
Rowell, P., see Hien, N.T. (56) 337
Rubinstein, C.P., Moratinos, L.C., Coso, O.A. and Sánchez-Rivas, C.
Improvements in the transformation of *Bacillus subtilis* protoplasts with plasmid DNA (56) 67
Ryter, A., see Fréhel, C. (56) 225

Sánchez, J., see De los Reyes-Gavilán, C.G. (56) 301
Sánchez-Rivas, C., see Rubinstein, C.P. (56) 67
Santome, J.A., see Cazzulo, J.J. (56) 215
Sayadi, S., Berry, F., Nasri, M., Barbotin, J.N. and Thomas, D.
Increased stability of pBR322-related plasmids in *Escherichia coli* W3101 grown in carrageenan gel beads (56) 307
Schleifer, K.H., see Amann, R. (56) 253
Segondy, M., Allardet-Servent, A., Caravano, R. and Ramuz, M.
Common physical map of four *Brucella* bacteriophage genomes (56) 177
Serwold-Davis, T.M. and Groman, N.B.

Identification of a methylase gene for erythromycin resistance within the sequence of a spontaneously deleting fragment of *Corynebacterium diphtheriae* plasmid pNG2 (56) 7
Shay, B.J., Egan, A.F., Wright, M. and Rogers, P.J.
Cysteine metabolism in an isolate of *Lactobacillus sake*: Plasmid composition and cysteine transport (56) 183
Sidhu, G.S., see Falah, A.M.S. (56) 89
Simpson, L.M., see Massad, G. (56) 295
Singh, S.
Regulation of urea-uptake in the cyanobacterium *Anabaena doliolum* (56) 281
Singh, Y., see Falah, A.M.S. (56) 89
Smoker, J.A. and Barnum, S.R.
Rapid small-scale DNA isolation from filamentous cyanobacteria (56) 119
Smyth, C.J., see Huang, J. (56) 109
Smyth, C.J., see Twohig, J. (56) 327
Sougakoff, W., Goussard, S. and Courvalin, P.
The TEM-3 β-lactamase, which hydrolyzes broad-spectrum cephalosporins, is derived from the TEM-2 penicillinase by two amino acid substitutions (56) 343
Stack, R.J. and Ericsson, L.D.
Methods for the identification and analysis of L-altrose in bacterial polysaccharides (56) 1
Stewart, W.D.P., see Hien, N.T. (56) 337
Suvorov, A., Kok, J. and Venema, G.
Transformation of group A streptococci by electroporation (56) 95
Swinfield, T.-J., see Oultram, J.D. (56) 83

Tacon, W.C.A., see Chew, L.C.K. (56) 101
Tagami, H., Tayama, K., Tohyama, T., Fukaya, M., Okumura, H., Kawamura, Y., Horinouchi, S. and Beppu, T.
Purification and properties of a site-specific restriction endonuclease *Aaa*I from *Acetobacter aceti* subsp. *aceti* No. 1023 (56) 161
Takashina, T., see Hamamoto, T. (56) 221
Tanahashi, H., see Gruber, K. (56) 113
Tartera, C., Bosch, A. and Jofre, J.
The inactivation of bacteriophages infecting *Bacteroides fragilis* by chlorine treatment and UV-irradiation (56) 313
Tayama, K., see Tagami, H. (56) 161
Thomas, D., see Sayadi, S. (56) 307
Thompson, D.E., see Oultram, J.D. (56) 83
Tohyama, T., see Tagami, H. (56) 161
Träger, L., see Kempf, B. (56) 237
Trollmo, C., André, L., Blomberg, A. and Adler, L.
Physiological overlap between osmotolerance and thermotolerance in *Saccharomyces cerevisiae* (56) 321
Tsuboi, A., see Gruber, K. (56) 113
Tsukagoshi, N., see Gruber, K. (56) 113
Turchetti, G., see Galeazzi, L. (56) 317
Twohig, J., Boylan, M. and Smyth, C.J.
Expression of CS fimbriae in *Escherichia coli* strains of human and animal origin belonging to O-serovar 6, K-serovar 15 or H-serovar 16 (56) 327

Udaka, S., see Gruber, K. (56) 113

Vasudevan, N. and Mahadevan, A.
Degradation of *p*-benzyloxyphenol by *Acinetobacter* sp. (56) 349
Venema, G., see Suvorov, A. (56) 95
Venkitasubramanian, T.A., see Falah, A.M.S. (56) 89

Wernstedt, C., see Cazzulo, J.J. (56) 215
Willison, J.C. and Lac, B.
Behaviour of Nif⁻ mutants of *Rhodobacter capsulatus* in photosynthetic, ammonia-limited chemostat cultures (56) 61
Wright, G. and Rogers, H.J.
Spherical and rod shaped protoplasts from β-lactam antibiotic treated cultures of *Bacillus subtilis* (56) 15
Wright, M., see Shay, B.J. (56) 183

Yacoob, R., see Zealey, G. (56) 123
Yamada, H., see Izumi, Y. (56) 277
Yamamoto, N. and Droffner, M.L.
Anaerobic expression of the *gyrA* gene as demonstrated by β-galactosidase activity in *gyrA*::Mu-*lac* fusion derivatives of *Escherichia coli* (56) 209
Yamato, I., Nakamura, H., Murakami, H. and Anraku, Y.
Mapping and disruption of the *cybB* gene coding for cytochrome b_{561} in *Escherichia coli* (56) 21
Yashphe, J., see Avraham, Y. (56) 29

Zealey, G., Dion, M., Loosmore, S., Yacoob, R. and Klein, M.
High frequency transformation of *Bordetella* by electroporation (56) 123

FEMS Microbiology Letters

SUBJECT INDEX VOLUME 56

gyrA
DNA gyrase; Strict aerobic growth; Anaerobiosis; Gene fusion; Nalidixic acid resistance (Yamamoto, N. (56) 209)

Acetobacter
Restriction endonuclease (Tagami, H. (56) 161)

***Acinetobacter* sp.**
Lignin model substance; Degradation (Vasudevan, N. (56) 349)

Acquired osmotolerance
Conditioning; Acquired thermotolerance; Physiological overlap; *sn*-Glycerol 3-P dehydrogenase; Heat shock protein; *Saccharomyces cerevisiae* (Trollmo, C. (56) 321)

Acquired thermotolerance
Conditioning; Acquired osmotolerance; Physiological overlap; *sn*-Glycerol 3-P dehydrogenase; Heat shock protein; *Saccharomyces cerevisiae* (Trollmo, C. (56) 321)

Actin
Penicillin; Cephalosporin; *Cephalosporium acremonium*; Blastospore; Cytochalasins; Cysteine; Glutathione; Reductases (Crabbe, M.J.C. (56) 71)

Adenosine triphosphatase
Vibrio alginolyticus; Cell membrane (Dmitriev, O.Y. (56) 79)

Adhesin
Antral gastritis; Duodenal ulcer; Pathogenesis; Virulence factor (Huang, J. (56) 109)

Adsorption
Phage adsorption; *Streptomyces antibioticus*; Endodeoxyribonuclease (De los Reyes-Gavilán, C.G. (56) 301)

Affinity chromatography
Clostridium difficile toxin A; Bovine thyroglobulin (Kamiya, S. (56) 331)

Alditol acetates
Butyrivibrio fibrisolvens; L-altrose; 1,6-anhydroaltrose; Extracellular polysaccharides; (−)-2-Octanol (Stack, R.J. (56) 1)

Allelic exchange
Legionella pneumophila; Conjugal DNA transfer; Counterselectable plasmids; U937 cells (Cianciotto, N.P. (56) 203)

Amino acid composition
Trypanosoma cruzi; Glutamate dehydrogenase; NAD; NADP; Purification; N-terminal sequence (Cazzulo, J.J. (56) 215)

Amino acid transport
(Flores, E. (56) 127)

Ammonia production
Anabaena variabilis; Glutamine synthetase; mRNA; Mutant strain (Hien, N.T. (56) 337)

Anabaena doliolum
Urea-uptake; Cyanobacterium; Regulation (Singh, S. (56) 281)

Anabaena variabilis
Ammonia production; Glutamine synthetase; mRNA; Mutant strain (Hien, N.T. (56) 337)

Anaerobe
Thermophile; Carbohydrate utilisation (Patel, B.K.C. (56) 285)

Anaerobic
Catabolite repression; Gene fusion; Beta-galactosidase (Reams, S.G. (56) 231)

Anaerobiosis
DNA gyrase; Strict aerobic growth; Gene fusion; Nalidixic acid resistance; *gyrA* (Yamamoto, N. (56) 209)

1,6-anhydroaltrose
Butyrivibrio fibrisolvens; L-altrose; Extracellular polysaccharides; (−)-2-Octanol; Alditol acetates (Stack, R.J. (56) 1)

Antigen
Sheep antibody; *Pasteurella haemolytica*; SDS PAGE; Immunoblotting (Donachie, W. (56) 271)

Antral gastritis
Duodenal ulcer; Pathogenesis; Virulence factor; Adhesin (Huang, J. (56) 109)

ATP synthase
β-subunit gene; Nucleotide sequence; *Propionigenium modestum* (Amann, R. (56) 253)

***Azotobacter* sp.**
Degradation of quinaldic acid; Meta-cleavage product; 2-oxo-3-(4′-hydroxy-2′-oxo-3′,4′-en-butyrate)-pyridine-6-carboxylic acid; Chemical mutagenesis (Dembek, G. (56) 261)

0378-1097/88/$03.50 © 1988 Federation of European Microbiological Societies

Azotobacter vinelandii
Metronidazole; Flavin; Cytochrome (Peterson, J.B. (56) 135)

Bacillus brevis
Cell wall; S-layer (Gruber, K. (56) 113)

Bacillus subtilis
Protoplast; β-Lactam antibiotic (Wright, G. (56) 15)

Maltogenic amylase; Cloning; Sequence (Diderichsen, B. (56) 53)

Protoplast; Transformation; Plasmid (Rubinstein, C.P. (56) 67)

Bacterial peroxidase detection
Chlorpromazine; Cytochrome oxidase-positive bacteria (Galeazzi, L. (56) 317)

Bacteriophages
Disinfection; UV-irradiation; Chlorine; Tap water; Sewage; *Bacteroides fragilis* (Tartera, C. (56) 313)

Bacteroides fragilis
Disinfection; UV-irradiation; Chlorine; Bacteriophages; Tap water; Sewage (Tartera, C. (56) 313)

Beta-galactosidase
Catabolite repression; Gene fusion; Anaerobic (Reams, S.G. (56) 231)

Bifidobacteria
Blastogenesis (Gómez, E. (56) 47)

β-lactamase
Klebsiella pneumoniae; Nucleotide sequence; Mutation (Sougakoff, W. (56) 343)

Blastogenesis
Bifidobacteria (Gómez, E. (56) 47)

Blastospore
Penicillin; Cephalosporin; *Cephalosporium acremonium*; Actin; Cytochalasins; Cysteine; Glutathione; Reductases (Crabbe, M.J.C. (56) 71)

Blood group N-specific adhesin
Escherichia coli haemagglutinin; Nonfimbrial adhesin (Grünberg, J. (56) 241)

Bordetella
Transformation; Electroporation; Electric field pulses (Zealey, G. (56) 123)

Bovine thyroglobulin
Clostridium difficile toxin A; Affinity chromatography (Kamiya, S. (56) 331)

Bradyrhizobium japonicum
Reversed respiratory electron transport; Chemolithoautotrophy; Reductive pentose phosphate cycle; Nitrogen fixation (Häger, K.-P. (56) 189)

pBR322-related plasmid
Continuous culture; Immobilized cell; Plasmid stability; Plasmid copy number (Sayadi, S. (56) 307)

Brucella phages
DNA; Restriction map (Segondy, M. (56) 177)

β-subunit gene
ATP synthase; Nucleotide sequence; *Propionigenium modestum* (Amann, R. (56) 253)

Butyricibrio fibrisolvens
L-altrose; 1,6-anhydroaltrose; Extracellular polysaccharides; (−)-2-Octanol; Alditol acetates (Stack, R.J. (56) 1)

Calcium binding protein
Calmodulin; Mycobacteria (Falah, A.M.S. (56) 89)

Calmodulin
Calcium binding protein; Mycobacteria (Falah, A.M.S. (56) 89)

Capsule
Mycobacteria; Electron microscopy (Fréhel, C. (56) 225)

Carbohydrate utilisation
Thermophile; Anaerobe (Patel, B.K.C. (56) 285)

Catabolite repression
Gene fusion; Beta-galactosidase; Anaerobic (Reams, S.G. (56) 231)

Cell division
Triangular bacterium; Cell plate; Halobacterium; Cinematography (Hamamoto, T. (56) 221)

Cell membrane
Vibrio alginolyticus; Adenosine triphosphatase (Dmitriev, O.Y. (56) 79)

Cell plate
Triangular bacterium; Cell division; Halobacterium; Cinematography (Hamamoto, T. (56) 221)

Cell wall
Bacillus brevis; S-layer (Gruber, K. (56) 113)

Cephalosporin
Penicillin; *Cephalosporium acremonium*; Blastospore; Actin; Cytochalasins; Cysteine; Glutathione; Reductases (Crabbe, M.J.C. (56) 71)

Cephalosporium acremonium
Penicillin; Cephalosporin; Blastospore; Actin; Cytochalasins; Cysteine; Glutathione; Reductases (Crabbe, M.J.C. (56) 71)

Chemical mutagenesis
Degradation of quinaldic acid; Meta-cleavage product; 2-oxo-3-(4′-hydroxy-2′-oxo-3′,4′-en-butyrate)-pyridine-6-carboxylic acid; *Azotobacter sp.* (Dembek, G. (56) 261)

Chemolithoautotrophy
Reversed respiratory electron transport; Reductive pentose phosphate cycle; Nitrogen fixation; *Bradyrhizobium japonicum* (Häger, K.-P. (56) 189)

Chemostat culture
Escherichia coli; Plasmid; Genetic stability (Chew, L.C.K. (56) 101)

Chlamydia
Penicillin; Outer membrane proteins; Protein expression (Cevenini, R. (56) 41)

Chlorine
Disinfection; UV-irradiation; Bacteriophages; Tap water; Sewage; *Bacteroides fragilis* (Tartera, C. (56) 313)

Chlorpromazine
Bacterial peroxidase detection; Cytochrome oxidase-positive bacteria (Galeazzi, L. (56) 317)

Cholera toxin
Ibuprofen (Peterson, J.W. (56) 139)

Chorismate
Enterobactin; Isochorismate synthase; Iron regulation (Elkins, M.F. (56) 35)

Cinematography
Triangular bacterium; Cell plate; Cell division; Halobacterium (Hamamoto, T. (56) 221)

Cloning
Maltogenic amylase; Sequence; *Bacillus subtilis* (Diderichsen, B. (56) 53)

Cloning vector
Clostridium acetobutylicum; Transformation; Electroporation (Oultram, J.D. (56) 83)

Clostridium acetobutylicum
Transformation; Cloning vector; Electroporation (Oultram, J.D. (56) 83)

***Clostridium difficile* toxin A**
Affinity chromatography; Bovine thyroglobulin (Kamiya, S. (56) 331)

Colonization factor antigen II
CS3 fimbriae; Host restricted expression of CS fimbriae; Enterotoxigenic *Escherichia coli* (Twohig, J. (56) 327)

Conditioning
Acquired osmotolerance; Acquired thermotolerance; Physiological overlap; *sn*-Glycerol 3-P dehydrogenase; Heat shock protein; *Saccharomyces cerevisiae* (Trollmo, C. (56) 321)

Conjugal DNA transfer
Legionella pneumophila; Counterselectable plasmids; Allelic exchange; U937 cells (Cianciotto, N.P. (56) 203)

Continuous culture
Nif$^-$ mutants; *Rhodobacter capsulatus*; H_2 production (Willison, J.C. (56) 61)

pBR322-related plasmid; Immobilized cell; Plasmid stability; Plasmid copy number (Sayadi, S. (56) 307)

Corynebacterium diphtheria
Macrolide-lincosamide-streptogramin B resistance; Erythromycin resistance; Methylase gene; Spontaneous deletion; *R*-plasmid (Serwold-Davis, T.M. (56) 7)

Counterselectable plasmids
Legionella pneumophila; Conjugal DNA transfer; Allelic exchange; U937 cells (Cianciotto, N.P. (56) 203)

CrO_4^{2-} resistance
P. aeruginosa; Plasmid (Cervantes, C. (56) 173)

CS3 fimbriae
Colonization factor antigen II; Host restricted expression of CS fimbriae; Enterotoxigenic *Escherichia coli* (Twohig, J. (56) 327)

Cyanobacteria
DNA isolation; Plasmid (Smoker, J.A. (56) 119)

Cyanobacterium
Anabaena doliolum; Urea-uptake; Regulation (Singh, S. (56) 281)

Cysteine
Penicillin; Cephalosporin; *Cephalosporium acremonium*; Blastospore; Actin; Cytochalasins; Glutathione; Reductases (Crabbe, M.J.C. (56) 71)

Lactic acid; *Lactobacillus sake*; Plasmid composition (Shay, B.J. (56) 183)

Cytochalasins
Penicillin; Cephalosporin; *Cephalosporium acremonium*; Blastospore; Actin; Cysteine; Glutathione; Reductases (Crabbe, M.J.C. (56) 71)

Cytochrome
Azotobacter vinelandii; Metronidazole; Flavin (Peterson, J.B. (56) 135)

Cytochrome b_{561}
Gene, cybB; *Escherichia coli* (Yamato, I. (56) 21)

Cytochrome oxidase-positive bacteria
Chlorpromazine; Bacterial peroxidase detection (Galeazzi, L. (56) 317)

Cytotoxic activity
Vero toxin; Nicked and unnicked Shiga-like toxin (Kongmuang, U. (56) 105)

Cytotoxin
Virulence; *Vibrio vulnificus* (Massad, G. (56) 295)

Degradation
Acinetobacter sp.; Lignin model substance (Vasudevan, N. (56) 349)

Degradation of quinaldic acid
Meta-cleavage product; 2-oxo-3-(4′-hydroxy-2′-oxo-3′,4′-en-butyrate)-pyridine-6-carboxylic acid; Chemical mutagenesis; *Azotobacter sp.* (Dembek, G. (56) 261)

2,3-DHBA
Rhizobium leguminosarum IARI 102; Siderophore; Iron (Patel, H.N. (56) 131)

Disinfection
UV-irradiation; Chlorine; Bacteriophages; Tap water; Sewage; *Bacteroides fragilis* (Tartera, C. (56) 313)

DNA
Brucella phages; Restriction map (Segondy, M. (56) 177)

DNA gyrase
Strict aerobic growth; Anaerobiosis; Gene fusion; Nalidixic acid resistance; *gyrA* (Yamamoto, N. (56) 209)

DNA hybridization
Enterobacteriaceae; Glucose transport (Bouvet, O.M.M. (56) 145)

DNA isolation
Cyanobacteria; Plasmid (Smoker, J.A. (56) 119)

Duodenal ulcer
Antral gastritis; Pathogenesis; Virulence factor; Adhesin (Huang, J. (56) 109)

Electric field pulses
Bordetella; Transformation; Electroporation (Zealey, G. (56) 123)

Electron microscopy
Mycobacteria; Capsule (Fréhel, C. (56) 225)

Electroporation
Clostridium acetobutylicum; Transformation; Cloning vector (Oultram, J.D. (56) 83)

Streptococcus pyogenes; Transformation; Plasmid (Suvorov, A. (56) 95)

Bordetella; Transformation; Electric field pulses (Zealey, G. (56) 123)

Endodeoxyribonuclease
Phage adsorption; Adsorption; *Streptomyces antibioticus* (De los Reyes-Gavilán, C.G. (56) 301)

Enterobacteriaceae
Glucose transport; DNA hybridization (Bouvet, O.M.M. (56) 145)

Enterobactin
Chorismate; Isochorismate synthase; Iron regulation (Elkins, M.F. (56) 35)

Enterotoxigenic *Escherichia coli*
Colonization factor antigen II; CS3 fimbriae; Host restricted expression of CS fimbriae (Twohig, J. (56) 327)

Erythromycin resistance
Corynebacterium diphtheria; Macrolide-lincosamide-streptogramin B resistance; Methylase gene; Spontaneous deletion; *R*-plasmid (Serwold-Davis, T.M. (56) 7)

Escherichia coli
Gene, cybB; Cytochrome b_{561} (Yamato, I. (56) 21)

Chemostat culture; Plasmid; Genetic stability (Chew, L.C.K. (56) 101)

Hemolysin excretion; Mutant (Muñoa, F. (56) 167)

Fimbrial antigen F165; Production; Purification (Fairbrother, J.M. (56) 247)

Ribosomal mutant (Mikkola, R. (56) 265)

***Escherichia coli* haemagglutinin**
Nonfimbrial adhesin; Blood group N-specific adhesin (Grünberg, J. (56) 241)

Ethanol
Heat shock response; *Sulfolobus acidocaldarius*; *Thiobacillus ferrooxidans*; Thermotolerance; Protein synthesis (Jerez, C.A. (56) 289)

Evolutionary conservation / eubacteria / archaebacteria
Yeast HSP70 gene; Thermophiles (Lambert, E. (56) 157)

Extracellular polysaccharides
Butyrivibrio fibrisolvens; L-altrose; 1,6-anhydroaltrose; (−)-2-Octanol; Alditol acetates (Stack, R.J. (56) 1)

Fermentation
Phototrophic bacteria; Fumarate reduction (Hiraishi, A. (56) 199)

Fimbrial antigen F165
Escherichia coli; Production; Purification (Fairbrother, J.M. (56) 247)

Flavin
Azotobacter vinelandii; Metronidazole; Cytochrome (Peterson, J.B. (56) 135)

Formate dehydrogenase
Methylotroph; *Mycobacterium gastri* (Izumi, Y. (56) 277)

Fumarate reduction
Fermentation; Phototrophic bacteria (Hiraishi, A. (56) 199)

Fungal polygalacturonase
Plate assay; Ruthenium red (McKay, A.M. (56) 354)

Gene, cybB
Cytochrome b_{562}; *Escherichia coli* (Yamato, I. (56) 21)

Gene fusion
DNA gyrase; Strict aerobic growth; Anaerobiosis; Nalidixic acid resistance; *gyrA* (Yamamoto, N. (56) 209)

Catabolite repression; Beta-galactosidase; Anaerobic (Reams, S.G. (56) 231)

Genetic stability
Escherichia coli; Chemostat culture; Plasmid (Chew, L.C.K. (56) 101)

Glucose transport
Enterobacteriaceae; DNA hybridization (Bouvet, O.M.M. (56) 145)

Glutamate dehydrogenase
Trypanosoma cruzi; NAD; NADP; Purification; Amino acid composition; N-terminal sequence (Cazzulo, J.J. (56) 215)

Glutamine synthetase
Ammonia production; *Anabaena variabilis*; mRNA; Mutant strain (Hien, N.T. (56) 337)

Glutathione
Penicillin; Cephalosporin; *Cephalosporium acremonium*; Blastospore; Actin; Cytochalasins; Cysteine; Reductases (Crabbe, M.J.C. (56) 71)

***sn*-Glycerol 3-P dehydrogenase**
Conditioning; Acquired osmotolerance; Acquired thermotolerance; Physiological overlap; Heat shock protein; *Saccharomyces cerevisiae* (Trollmo, C. (56) 321)

Halobacterium
Triangular bacterium; Cell plate; Cell division; Cinematography (Hamamoto, T. (56) 221)

Heat shock protein
Conditioning; Acquired osmotolerance; Acquired thermotolerance; Physiological overlap; *sn*-Glycerol 3-P dehydrogenase; *Saccharomyces cerevisiae* (Trollmo, C. (56) 321)

Heat shock response
Sulfolobus acidocaldarius; *Thiobacillus ferrooxidans*; Thermotolerance; Protein synthesis; Ethanol (Jerez, C.A. (56) 289)

Hemolysin excretion
Escherichia coli; Mutant (Muñoa, F. (56) 167)

Host restricted expression of CS fimbriae
Colonization factor antigen II; CS3 fimbriae; Enterotoxigenic *Escherichia coli* (Twohig, J. (56) 327)

H_2 production
Nif$^-$ mutants; *Rhodobacter capsulatus*; Continuous culture (Willison, J.C. (56) 61)

Ibuprofen
Cholera toxin (Peterson, J.W. (56) 139)

Immobilized cell
pBR322-related plasmid; Continuous culture; Plasmid stability; Plasmid copy number (Sayadi, S. (56) 307)

Immunoblotting
Sheep antibody; *Pasteurella haemolytica*; Antigen; SDS PAGE (Donachie, W. (56) 271)

Iron
Rhizobium leguminosarum IARI 102; Siderophore; 2,3-DHBA (Patel, H.N. (56) 131)

Iron regulation
Enterobactin; Chorismate; Isochorismate synthase (Elkins, M.F. (56) 35)

Isochorismate synthase
Enterobactin; Chorismate; Iron regulation (Elkins, M.F. (56) 35)

Klebsiella pneumoniae
β-lactamase; Nucleotide sequence; Mutation (Sougakoff, W. (56) 343)

β-Lactam antibiotic
Bacillus subtilis; Protoplast (Wright, G. (56) 15)

Lactic acid
Cysteine; *Lactobacillus sake*; Plasmid composition (Shay, B.J. (56) 183)

Lactobacillus casei
Thymidine phosphorylase; Uridine phosphorylase (Avraham, Y. (56) 29)

Lactobacillus sake
Cysteine; Lactic acid; Plasmid composition (Shay, B.J. (56) 183)

L-altrose
Butyrivibrio fibrisolvens; 1,6-anhydroaltrose; Extracellular polysaccharides; (−)-2-Octanol; Alditol acetates (Stack, R.J. (56) 1)

Legionella pneumophila
Conjugal DNA transfer; Counterselectable plasmids; Allelic exchange; U937 cells (Cianciotto, N.P. (56) 203)

Lignin model substance
Acinetobacter sp.; Degradation (Vasudevan, N. (56) 349)

Macrolide-lincosamide-streptogramin B resistance
Corynebacterium diphtheria; Erythromycin resistance; Methylase gene; Spontaneous deletion; *R*-plasmid (Serwold-Davis, T.M. (56) 7)

Maltogenic amylase
Cloning; Sequence; *Bacillus subtilis* (Diderichsen, B. (56) 53)

Meta-cleavage product
Degradation of quinaldic acid; 2-oxo-3-(4′-hydroxy-2′-oxo-3′,4′-en-butyrate)-pyridine-6-carboxylic acid; Chemical mutagenesis; *Azotobacter sp.* (Dembek, G. (56) 261)

Methylase gene
Corynebacterium diphtheria; Macrolide-lincosamide-streptogramin B resistance; Erythromycin resistance; Spontaneous deletion; *R*-plasmid (Serwold-Davis, T.M. (56) 7)

Methylotroph
Formate dehydrogenase; *Mycobacterium gastri* (Izumi, Y. (56) 277)

Metronidazole
Azotobacter vinelandii; Flavin; Cytochrome (Peterson, J.B. (56) 135)

Monoclonal antibodies
Steroid-transforming enzyme; *Streptomyces hydrogenans* (Kempf, B. (56) 237)

Mutant
Hemolysin excretion; *Escherichia coli* (Muñoa, F. (56) 167)

Mutant selection
Porphyrin metabolism (Javor, G.T. (56) 195)

Mutant strain
Ammonia production; *Anabaena variabilis*; Glutamine synthetase; mRNA (Hien, N.T. (56) 337)

Mutation
β-lactamase; *Klebsiella pneumoniae*; Nucleotide sequence (Sougakoff, W. (56) 343)

Mycobacteria
Calmodulin; Calcium binding protein (Falah, A.M.S. (56) 89)

Capsule; Electron microscopy (Fréhel, C. (56) 225)

Mycobacterium gastri
Formate dehydrogenase; Methylotroph (Izumi, Y. (56) 277)

NAD
Trypanosoma cruzi; Glutamate dehydrogenase; NADP; Purification; Amino acid composition; N-terminal sequence (Cazzulo, J.J. (56) 215)

NADP
Trypanosoma cruzi; Glutamate dehydrogenase; NAD; Purification; Amino acid composition; N-terminal sequence (Cazzulo, J.J. (56) 215)

Nalidixic acid resistance
DNA gyrase; Strict aerobic growth; Anaerobiosis; Gene fusion; *gyrA* (Yamamoto, N. (56) 209)

Nicked and unnicked Shiga-like toxin
Vero toxin; Cytotoxic activity (Kongmuang, U. (56) 105)

Nif ⁻ mutants
Rhodobacter capsulatus; Continuous culture; H_2 production (Willison, J.C. (56) 61)

Nitrogen fixation
Reversed respiratory electron transport; Chemolithoautotrophy; Reductive pentose phosphate cycle; *Bradyrhizobium japonicum* (Häger, K.-P. (56) 189)

Nonfimbrial adhesin
Escherichia coli haemagglutinin; Blood group N-specific adhesin (Grünberg, J. (56) 241)

N-terminal sequence
Trypanosoma cruzi; Glutamate dehydrogenase; NAD; NADP; Purification; Amino acid composition (Cazzulo, J.J. (56) 215)

Nucleotide sequence
ATP synthase; β-subunit gene; *Propionigenium modestum* (Amann, R. (56) 253)

β-lactamase; *Klebsiella pneumoniae*; Mutation (Sougakoff, W. (56) 343)

(−)-2-Octanol
Butyrivibrio fibrisolvens; L-altrose; 1,6-anhydroaltrose; Extracellular polysaccharides; Alditol acetates (Stack, R.J. (56) 1)

Outer membrane proteins
Penicillin; *Chlamydia*; Protein expression (Cevenini, R. (56) 41)

2-oxo-3-(4′-hydroxy-2′-oxo-3′,4′-en-butyrate)-pyridine-6-carboxylic acid
Degradation of quinaldic acid; Meta-cleavage product; Chemical mutagenesis; *Azotobacter sp.* (Dembek, G. (56) 261)

P. aeruginosa
CrO_4^{2-} resistance; Plasmid (Cervantes, C. (56) 173)

Pasteurella haemolytica
Sheep antibody; Antigen; SDS PAGE; Immunoblotting (Donachie, W. (56) 271)

Pathogenesis
Antral gastritis; Duodenal ulcer; Virulence factor; Adhesin (Huang, J. (56) 109)

Penicillin
Outer membrane proteins; *Chlamydia*; Protein expression (Cevenini, R. (56) 41)

Cephalosporin; *Cephalosporium acremonium*; Blastospore; Actin; Cytochalasins; Cysteine; Glutathione; Reductases (Crabbe, M.J.C. (56) 71)

Phage adsorption
Adsorption; *Streptomyces antibioticus*; Endodeoxyribonuclease (De los Reyes-Gavilán, C.G. (56) 301)

Phototrophic bacteria
Fermentation; Fumarate reduction (Hiraishi, A. (56) 199)

Physiological overlap
Conditioning; Acquired osmotolerance; Acquired thermotolerance; *sn*-Glycerol 3-P dehydrogenase; Heat shock protein; *Saccharomyces cerevisiae* (Trollmo, C. (56) 321)

Plasmid
Bacillus subtilis; Protoplast; Transformation (Rubinstein, C.P. (56) 67)

Streptococcus pyogenes; Transformation; Electroporation (Suvorov, A. (56) 95)

Escherichia coli; Chemostat culture; Genetic stability (Chew, L.C.K. (56) 101)

Cyanobacteria; DNA isolation (Smoker, J.A. (56) 119)

CrO_4^{2-} resistance; *P. aeruginosa* (Cervantes, C. (56) 173)

Plasmid composition
Cysteine; Lactic acid; *Lactobacillus sake* (Shay, B.J. (56) 183)

Plasmid copy number
pBR322-related plasmid; Continuous culture; Immobilized cell; Plasmid stability (Sayadi, S. (56) 307)

Plasmid stability
pBR322-related plasmid; Continuous culture; Immobilized cell; Plasmid copy number (Sayadi, S. (56) 307)

Plate assay
Fungal polygalacturonase; Ruthenium red (McKay, A.M. (56) 354)

Porphyrin metabolism
Mutant selection (Javor, G.T. (56) 195)

Production
Escherichia coli; Fimbrial antigen F165; Purification (Fairbrother, J.M. (56) 247)

Propionigenium modestum
ATP synthase; β-subunit gene; Nucleotide sequence (Amann, R. (56) 253)

Protein expression
Penicillin; Outer membrane proteins; *Chlamydia* (Cevenini, R. (56) 41)

Protein synthesis
Heat shock response; *Sulfolobus acidocaldarius*; *Thiobacillus ferrooxidans*; Thermotolerance; Ethanol (Jerez, C.A. (56) 289)

Protoplast
Bacillus subtilis; β-Lactam antibiotic (Wright, G. (56) 15)

Bacillus subtilis; Transformation; Plasmid (Rubinstein, C.P. (56) 67)

Purification
Trypanosoma cruzi; Glutamate dehydrogenase; NAD; NADP; Amino acid composition; N-terminal sequence (Cazzulo, J.J. (56) 215)

Escherichia coli; Fimbrial antigen F165; Production (Fairbrother, J.M. (56) 247)

Reductases
Penicillin; Cephalosporin; *Cephalosporium acremonium*; Blastospore; Actin; Cytochalasins; Cysteine; Glutathione (Crabbe, M.J.C. (56) 71)

Reductive pentose phosphate cycle
Reversed respiratory electron transport; Chemolithoautotrophy; Nitrogen fixation; *Bradyrhizobium japonicum* (Häger, K.-P. (56) 189)

Regulation
Anabaena doliolum; Urea-uptake; Cyanobacterium (Singh, S. (56) 281)

Restriction endonuclease
Acetobacter (Tagami, H. (56) 161)

Restriction map
Brucella phages; DNA (Segondy, M. (56) 177)

Reversed respiratory electron transport
Chemolithoautotrophy; Reductive pentose phosphate cycle; Nitrogen fixation; *Bradyrhizobium japonicum* (Häger, K.-P. (56) 189)

***Rhizobium leguminosarum* IARI 102**
Siderophore; Iron; 2,3-DHBA (Patel, H.N. (56) 131)

Rhodobacter capsulatus
Nif$^-$ mutants; Continuous culture; H_2 production (Willison, J.C. (56) 61)

Ribosomal mutant
Escherichia coli (Mikkola, R. (56) 265)

mRNA
Ammonia production; *Anabaena variabilis*; Glutamine synthetase; Mutant strain (Hien, N.T. (56) 337)

***R*-plasmid**
Corynebacterium diphtheria; Macrolide-lincosamide-streptogramin B resistance; Erythromycin resistance; Methylase gene; Spontaneous deletion (Serwold-Davis, T.M. (56) 7)

Ruthenium red
Plate assay; Fungal polygalacturonase (McKay, A.M. (56) 354)

Saccharomyces cerevisiae
Conditioning; Acquired osmotolerance; Acquired thermotolerance; Physiological overlap; *sn*-Glycerol 3-P dehydrogenase; Heat shock protein (Trollmo, C. (56) 321)

SDS PAGE
Sheep antibody; *Pasteurella haemolytica*; Antigen; Immunoblotting (Donachie, W. (56) 271)

Sequence
Maltogenic amylase; Cloning; *Bacillus subtilis* (Diderichsen, B. (56) 53)

Sewage
Disinfection; UV-irradiation; Chlorine; Bacteriophages; Tap water; *Bacteroides fragilis* (Tartera, C. (56) 313)

Sheep antibody
Pasteurella haemolytica; Antigen; SDS PAGE; Immunoblotting (Donachie, W. (56) 271)

Siderophore
Rhizobium leguminosarum IARI 102; Iron; 2,3-DHBA (Patel, H.N. (56) 131)

S-layer
Bacillus brevis; Cell wall (Gruber, K. (56) 113)

Spontaneous deletion
Corynebacterium diphtheria; Macrolide-lincosamide-streptogramin B resistance; Erythromycin resistance; Methylase gene; *R*-plasmid (Serwold-Davis, T.M. (56) 7)

Steroid-transforming enzyme
Monoclonal antibodies; *Streptomyces hydrogenans* (Kempf, B. (56) 237)

Streptococcus pyogenes
Transformation; Electroporation; Plasmid (Suvorov, A. (56) 95)

Streptomyces antibioticus
Phage adsorption; Adsorption; Endodeoxyribonuclease (De los Reyes-Gavilán, C.G. (56) 301)

Streptomyces hydrogenans
Monoclonal antibodies; Steroid-transforming enzyme (Kempf, B. (56) 237)

Strict aerobic growth
DNA gyrase; Anaerobiosis; Gene fusion; Nalidixic acid resistance; *gyrA* (Yamamoto, N. (56) 209)

Sulfolobus acidocaldarius
Heat shock response; *Thiobacillus ferrooxidans*; Thermotolerance; Protein synthesis; Ethanol (Jerez, C.A. (56) 289)

Tap water
Disinfection; UV-irradiation; Chlorine; Bacteriophages; Sewage; *Bacteroides fragilis* (Tartera, C. (56) 313)

Thermophile
Anaerobe; Carbohydrate utilisation (Patel, B.K.C. (56) 285)

Thermophiles
Yeast HSP70 gene; Evolutionary conservation/eubacteria/archaebacteria (Lambert, E. (56) 157)

Thermotolerance
Heat shock response; *Sulfolobus acidocaldarius*; *Thiobacillus ferrooxidans*; Protein synthesis; Ethanol (Jerez, C.A. (56) 289)

Thiobacillus ferrooxidans
Heat shock response; *Sulfolobus acidocaldarius*; Thermotolerance; Protein synthesis; Ethanol (Jerez, C.A. (56) 289)

Thymidine phosphorylase
Uridine phosphorylase; *Lactobacillus casei* (Avraham, Y. (56) 29)

Transformation
Bacillus subtilis; Protoplast; Plasmid (Rubinstein, C.P. (56) 67)

Clostridium acetobutylicum; Cloning vector; Electroporation (Oultram, J.D. (56) 83)

Streptococcus pyogenes; Electroporation; Plasmid (Suvorov, A. (56) 95)

Bordetella; Electroporation; Electric field pulses (Zealey, G. (56) 123)

Triangular bacterium
Cell plate; Cell division; Halobacterium; Cinematography (Hamamoto, T. (56) 221)

Trypanosoma cruzi
Glutamate dehydrogenase; NAD; NADP; Purification; Amino acid composition; N-terminal sequence (Cazzulo, J.J. (56) 215)

U937 cells
Legionella pneumophila; Conjugal DNA transfer; Counter-selectable plasmids; Allelic exchange (Cianciotto, N.P. (56) 203)

Urea-uptake
Anabaena doliolum; Cyanobacterium; Regulation (Singh, S. (56) 281)

Uridine phosphorylase
Thymidine phosphorylase; *Lactobacillus casei* (Avraham, Y. (56) 29)

UV-irradiation
Disinfection; Chlorine; Bacteriophages; Tap water; Sewage; *Bacteroides fragilis* (Tartera, C. (56) 313)

Vero toxin
Nicked and unnicked Shiga-like toxin; Cytotoxic activity (Kongmuang, U. (56) 105)

Vibrio alginolyticus
Adenosine triphosphatase; Cell membrane (Dmitriev, O.Y. (56) 79)

Vibrio vulnificus
Cytotoxin; Virulence (Massad, G. (56) 295)

Virulence
Cytotoxin; *Vibrio vulnificus* (Massad, G. (56) 295)

Virulence factor
Antral gastritis; Duodenal ulcer; Pathogenesis; Adhesin (Huang, J. (56) 109)

Yeast HSP70 gene
Thermophiles; Evolutionary conservation/eubacteria/archaebacteria (Lambert, E. (56) 157)